

REMARKS

The applicants respectfully request reconsideration in view of the amendment and the following remarks. The applicants have amended the claims as suggested by the Examiner. The applicants have corrected the obvious typographical error with respect to formula I in claims 1, 7 and 19. In addition the applicants have added the variables "A" and "p" in claim 19. The applicants further corrected the obvious typographical error with respect to the definition of R³ in claims 1, 19, 25 and 26. The applicants have deleted the phrase "a C₆-C₁₀-aryl group, which is optionally halogenated" from claim 1. For the above reasons, the 35 USC §112 rejection should be withdrawn.


The applicants have already submitted the executed supplemental declaration as requested by the examiner. Enclosed is a copy of the Supplemental Declaration that was submitted on December 18, 2000.

A two month extension fee has been paid. If there are any additional fees due in connection with the filing of this response, including any fees required for an additional extension of time under 37 CFR 1.136, such an extension is requested and the Commissioner is authorized to charge or credit any overpayment to Deposit Account No. 03-2775.

For the reasons set forth above, Applicants believe that the claims are patentable and a prompt and favorable action is solicited. The applicants believe that these claims are in condition for allowance, however, if the Examiner disagrees, the applicants respectfully request that the Examiner telephone the undersigned at (302) 888-6270.

Respectfully submitted,

CONNOLLY BOVE LODGE & HUTZ LLP

By 

Ashley I. Pezzner

Registration No. 35,646

Telephone: 302/888-6270

AIP/ebd

Enclosure: Copy of Executed Declaration

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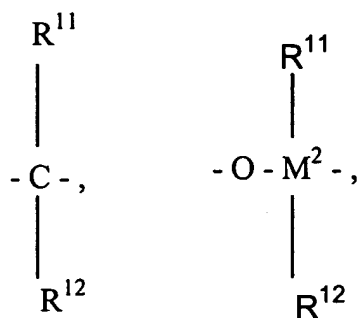
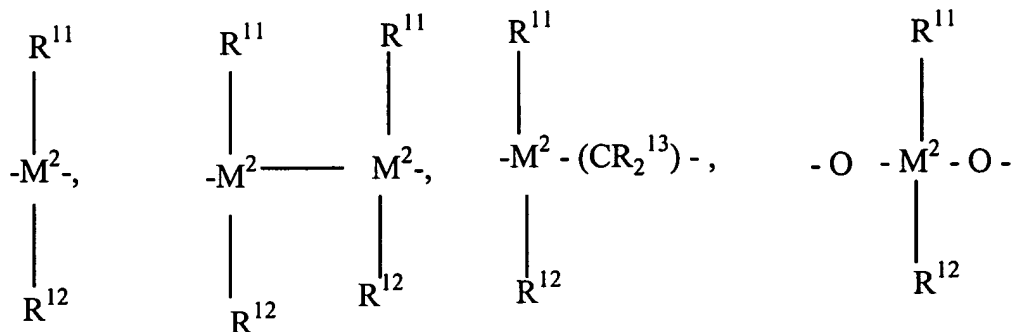
arylalkenyl group or a halogen atom,

R^3 is a hydrogen atom, a halogen atom, a C_2 - C_{10} -alkyl group, a C_1 - C_{10} -alkyl group which is halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

[R^3 and] R^4 [are identical or different and are] is a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, which is optionally halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

R^5 and R^6 are identical or different and are as defined for R^3 and R^4 , with the proviso that R^5 and R^6 are not hydrogen,

R^7 is



$=BR^{11}$, $=AlR^{11}$, $-Ge-$, $-Sn-$, $-O-$, $-S-$, $=SO$, $=SO_2$, $=NR^{11}$, $=CO$, $=PR^{11}$ or $=P(O)R^{11}$,

where

R^{11} , R^{12} and R^{13} are identical or different and are a hydrogen atom, a halogen atom, a C_1-C_{10} -alkyl group, a C_1-C_{10} -fluoroalkyl group, a C_6-C_{10} -aryl group, a C_6-C_{10} -fluoroaryl group, a C_1-C_{10} -alkoxy group, a C_2-C_{10} -alkenyl group, a C_7-C_{40} -arylalkyl group, a C_8-C_{40} -arylalkenyl group or a C_7-C_{40} -alkylaryl group, or a pair of substituents R^{11} and R^{12} or R^{11} and R^{13} in each case with the atoms connecting them, form a ring,

M^2 is silicon, germanium or tin,

R^8 and R^9 are identical or different and are as defined for R^{11}

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2,
[and]

the radicals R^{10} are identical or different and are as defined

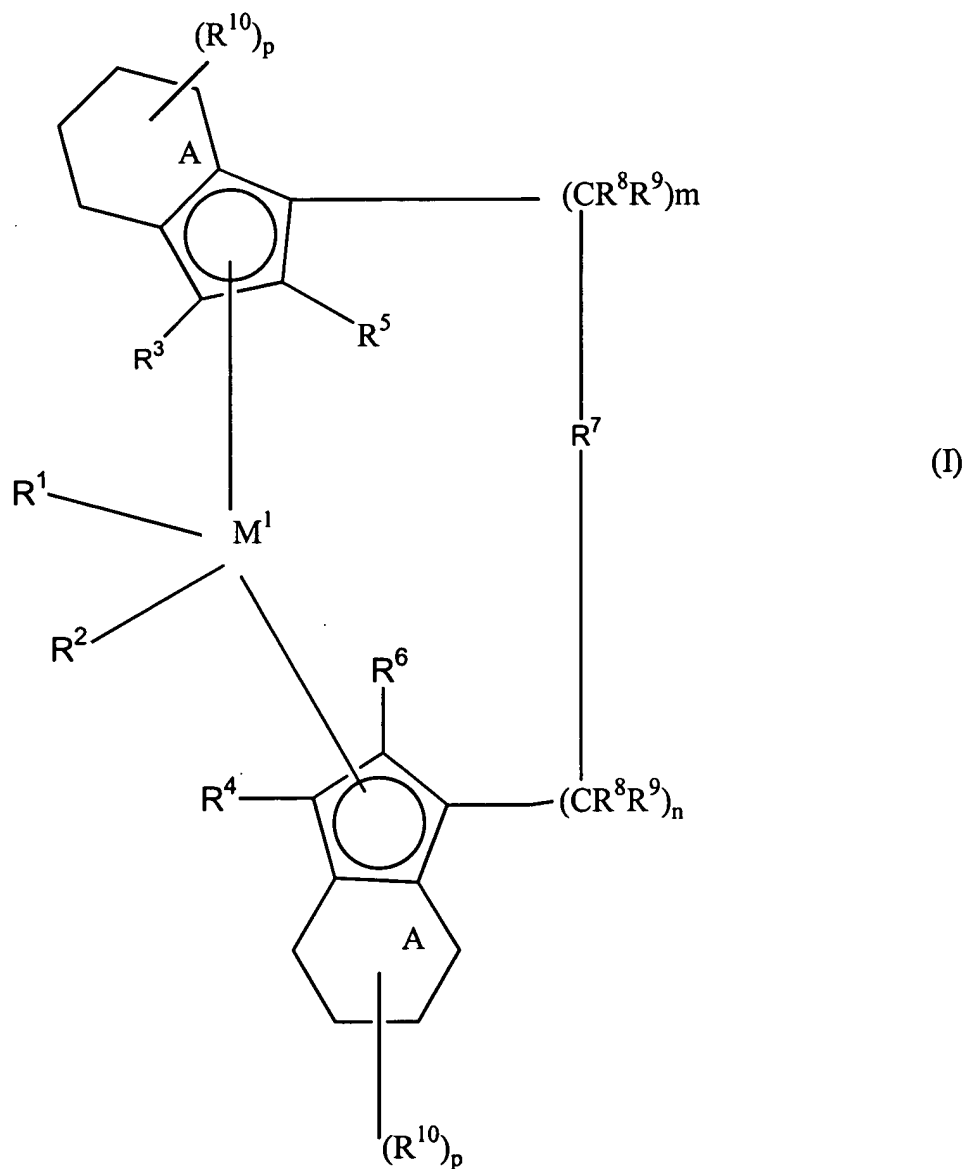
for R^{11} , R^{12} and R^{13} ,

rings A are saturated or aromatic,

p is 8, when rings A are saturated, and

p is 4, when rings A are aromatic.

7. A compound [as claimed in claim 1,] of the formula (I) for preparing essentially isotactic olefin polymers



in which

M¹ is a metal from group IVb, Vb or VIb of the Periodic Table

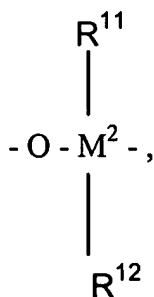
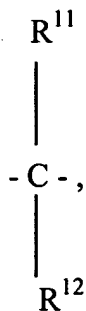
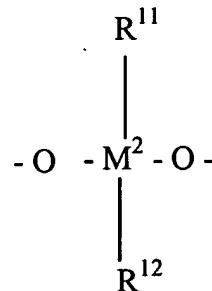
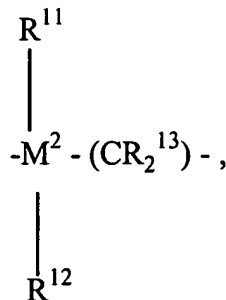
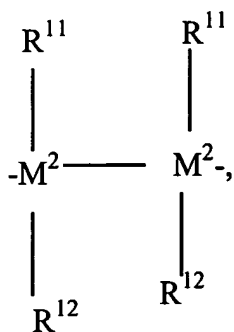
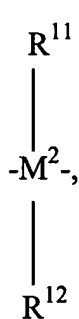
R¹ and R² are identical or different and are a hydrogen atom, a C₁-C₁₀-alkyl group, a C₁-C₁₀-alkoxy group, a C₆-C₁₀-aryl group, a C₆-C₁₀-aryloxy group, a C₂-C₁₀-

alkenyl group, a C₇-C₄₀-arylalkyl group, a C₇-C₄₀-alkylaryl group, a C₈-C₄₀-arylalkenyl group or a halogen atom,

R³ and R⁴ are hydrogen,

R⁵ and R⁶ are identical or different and are a halogen atom, a C₁-C₁₀-alkyl group, which is optionally halogenated, a C₆-C₁₀-aryl group, an -NR₂¹⁵, -SR¹⁵, -OSiR₃¹⁵, -SiR₃¹⁵ or -PR₂¹⁵ radical in which R¹⁵ is a halogen atom, a C₁-C₁₀-alkyl group or a C₆-C₁₀-aryl group

R⁷ is



$=BR^{11}, =AlR^{11}, -Ge-, -Sn-, -O-, -S-, =SO, =SO_2, =NR^{11}, =CO, =PR^{11}$ or $=P(O)R^{11}$,

where

R^{11}, R^{12} and R^{13} are identical or different and are a hydrogen atom, a halogen atom, a C_1-C_{10} -alkyl group, a C_1-C_{10} -fluoroalkyl group, a C_6-C_{10} -aryl group, a C_6-C_{10} -fluoroaryl group, a C_1-C_{10} -alkoxy group, a C_2-C_{10} -alkenyl group, a C_7-C_{40} -arylalkyl group, a C_8-C_{40} -arylalkenyl group or a C_7-C_{40} -alkylaryl group, or a pair of substituents R^{11} and R^{12} or R^{11} and R^{13} in each case with the atoms connecting them, form a ring,

M^2 is silicon, germanium or tin,

R^8 and R^9 are identical or different and are as defined for R^{11}

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2,

the radicals R^{10} are identical or different and are as defined

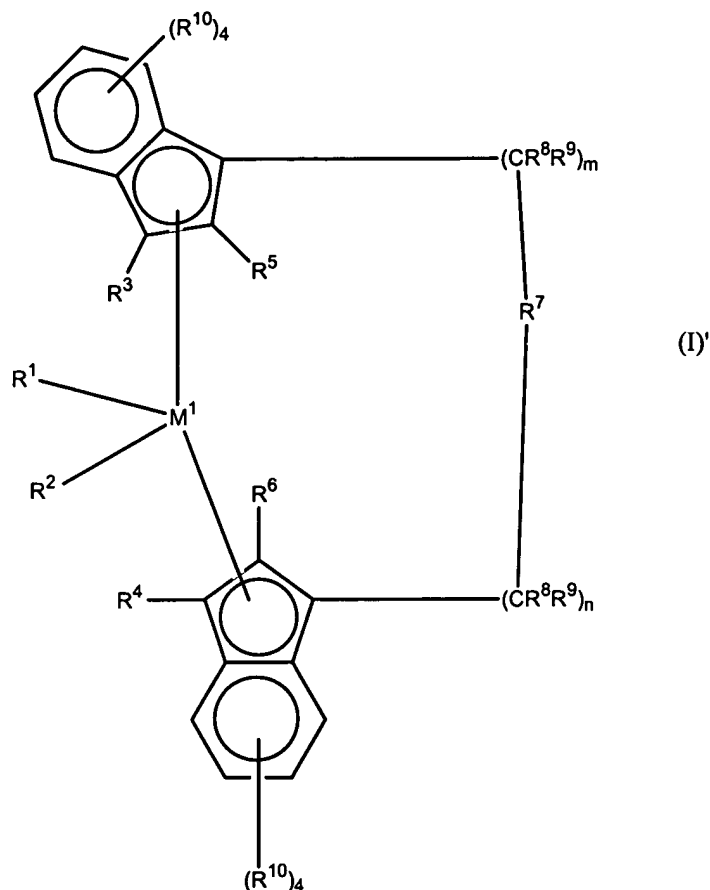
for R^{11}, R^{12} and R^{13} ,

rings A are saturated or aromatic,

p is 8, when rings A are saturated, and

p is 4, when rings A are aromatic.

19. A compound of the formula (I)'



in which

M¹ is a metal from group IVb, Vb or VIb of the Periodic Table,

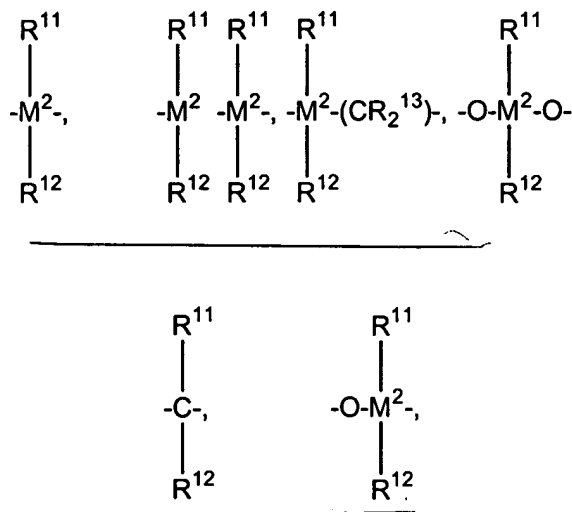
R¹ and R² are identical or different and are a hydrogen atom, a C₁-C₁₀-alkyl group, a C₁-C₁₀-alkoxy group, a C₆-C₁₀-aryl group, a C₆-C₁₀-aryloxy group, a C₂-C₁₀-alkenyl group, a C₇-C₄₀-arylalkyl group, a C₇-C₄₀-alkylaryl group, a C₈-C₄₀-arylalkenyl group or a halogen atom,

R³ is a hydrogen atom, a halogen atom, a C₂-C₁₀-alkyl group, a C₁-C₁₀-alkyl group which is halogenated, a C₆-C₁₀-aryl group, an -NR₂¹⁵, -SR¹⁵, -OSiR₃¹⁵, -SiR₃¹⁵ or -PR₂¹⁵ radical in which R¹⁵ is a halogen atom, a C₁-C₁₀-alkyl group or a C₆-C₁₀-aryl group,

R⁴ is a hydrogen atom, a halogen atom, a C₁-C₁₀-alkyl group, which is optionally halogenated, a C₆-C₁₀-aryl group, an -NR₂¹⁵, -SR¹⁵, -OSiR₃¹⁵, -SiR₃¹⁵ or -PR₂¹⁵ radical in which R¹⁵ is a halogen atom, a C₁-C₁₀-alkyl group or a C₆-C₁₀-aryl group,

R⁵ and R⁶ are identical or different and are as defined for R³ and R⁴, with the proviso that R⁵ and R⁶ are not hydrogen,

R⁷ is



=BR¹¹, =AlR¹¹, -Ge-, -Sn-, -O-, -S-, =SO, =SO₂, =NR¹¹, =CO, =PR¹¹ or =P(O)R¹¹,

where

R¹¹, R¹² and R¹³ are identical or different and are a hydrogen atom, a halogen atom, a C₁-C₁₀-alkyl group, a C₁-C₁₀-fluoroalkyl group, a C₆-C₁₀-aryl group, a C₂-C₁₀-alkenyl group, a C₇-C₄₀-arylalkyl group, a C₈-C₄₀-arylalkenyl group or a C₇-C₄₀-alkylaryl group, or a pair of substituents R¹¹ and R¹²-- or R¹¹ and R¹³, in each case with the atoms connecting them, form a ring,

M² is silicon, germanium or tin,

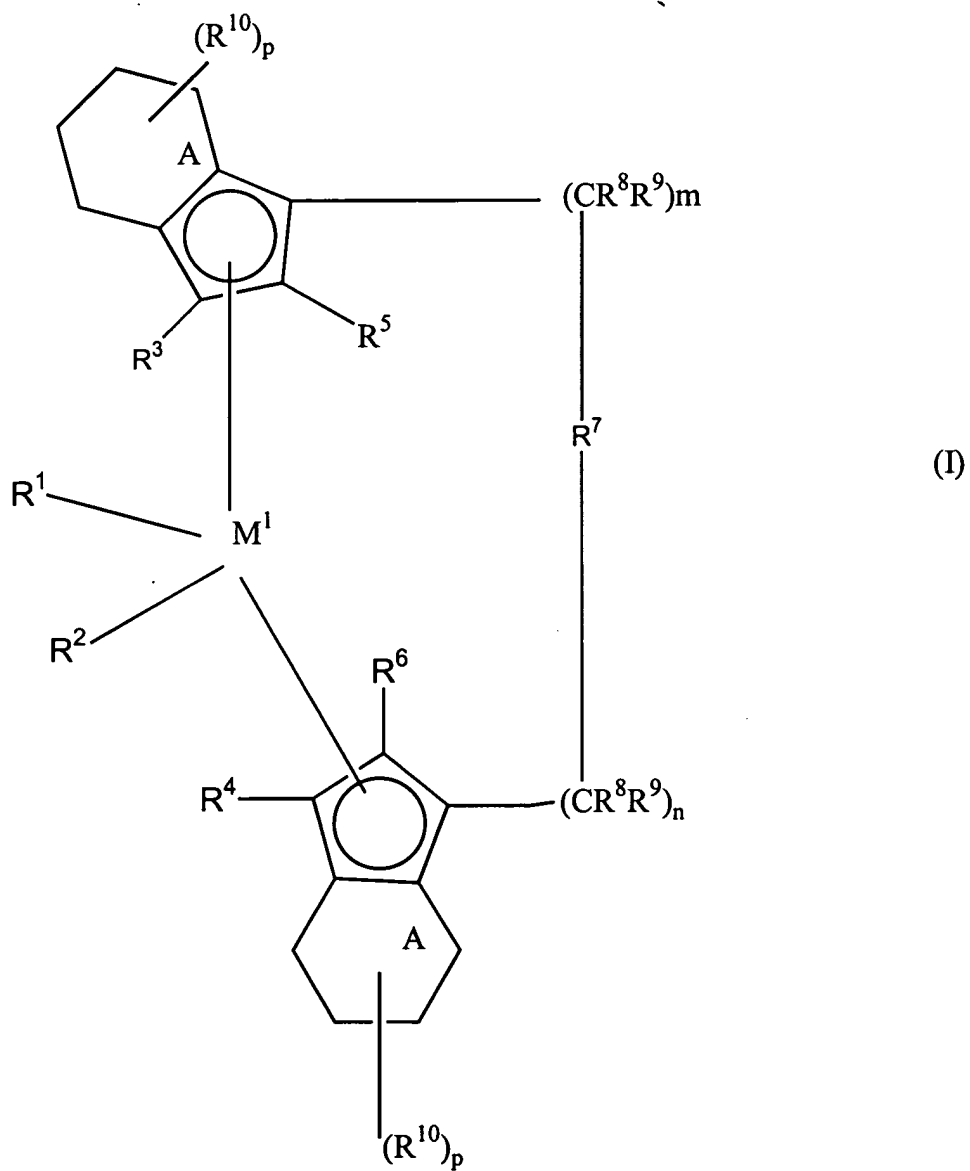
R⁸ and R⁹ are identical or different and are as defined for R¹¹

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2, the radicals R¹⁰ are the same or different and are as defined for R¹¹, R¹² and R¹³.

25. The compound as claimed in claim 1, wherein R³ is a hydrogen atom, a halogen atom, a C₁-C₁₀-alkyl group which is halogenated, a C₆-C₁₀-aryl group, an -NR₂¹⁵, -SR¹⁵, -OSiR₃¹⁵, -SiR₃¹⁵ or -PR₂¹⁵ radical in which R¹⁵ is a halogen atom, a C₁-C₁₀-alkyl group or a C₆-C₁₀-aryl group.
26. The compound as claimed in claim 1, wherein R³ is a hydrogen atom, a halogen atom, a C₆-C₁₀-aryl group, an -NR₂¹⁵, -SR¹⁵, -OSiR₃¹⁵, -SiR₃¹⁵ or -PR₂¹⁵ radical in which R¹⁵ is a halogen atom, a C₁-C₁₀-alkyl group or a C₆-C₁₀-aryl group.

Appendix II Clean copy of claims

1. A compound of the formula I for preparing essentially isotactic olefin polymers



in which

M^1 is a metal from group IVb, Vb or VIb of the Periodic Table

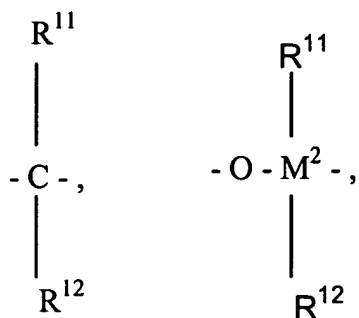
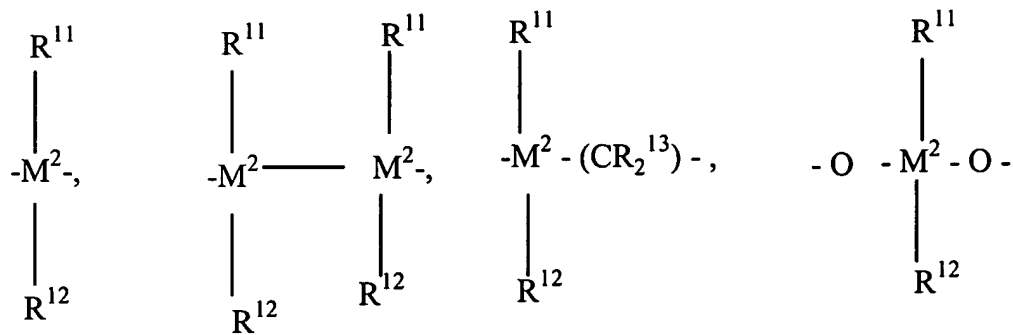
R^1 and R^2 are identical or different and are a hydrogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -alkoxy group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -aryloxy group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_7 - C_{40} -alkylaryl group, a C_8 - C_{40} -arylalkenyl group or a halogen atom,

R^3 is a hydrogen atom, a halogen atom, a C_2 - C_{10} -alkyl group, a C_1 - C_{10} -alkyl group which is halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

R^4 is a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, which is optionally halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

R^5 and R^6 are identical or different and are as defined for R^3 and R^4 , with the proviso that R^5 and R^6 are not hydrogen,

R^7 is



=BR¹¹, =AlR¹¹, -Ge-, -Sn-, -O-, -S-, =SO, =SO₂, =NR¹¹, =CO, =PR¹¹ or =P(O)R¹¹,

where

R¹¹, R¹² and R¹³ are identical or different and are a hydrogen atom, a halogen atom, a C₁-C₁₀-alkyl group, a C₁-C₁₀-fluoroalkyl group, a C₆-C₁₀-aryl group, a C₆-C₁₀-fluoroaryl group, a C₁-C₁₀-alkoxy group, a C₂-C₁₀-alkenyl group, a C₇-C₄₀-arylalkyl group, a C₈-C₄₀-arylalkenyl group or a C₇-C₄₀-alkylaryl group, or a pair of substituents R¹¹ and R¹²-- or R¹¹ and R¹³ in each case with the atoms connecting them, form a ring,

M² is silicon, germanium or tin,

R⁸ and R⁹ are identical or different and are as defined for R¹¹

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2,

the radicals R¹⁰ are identical or different and are as defined

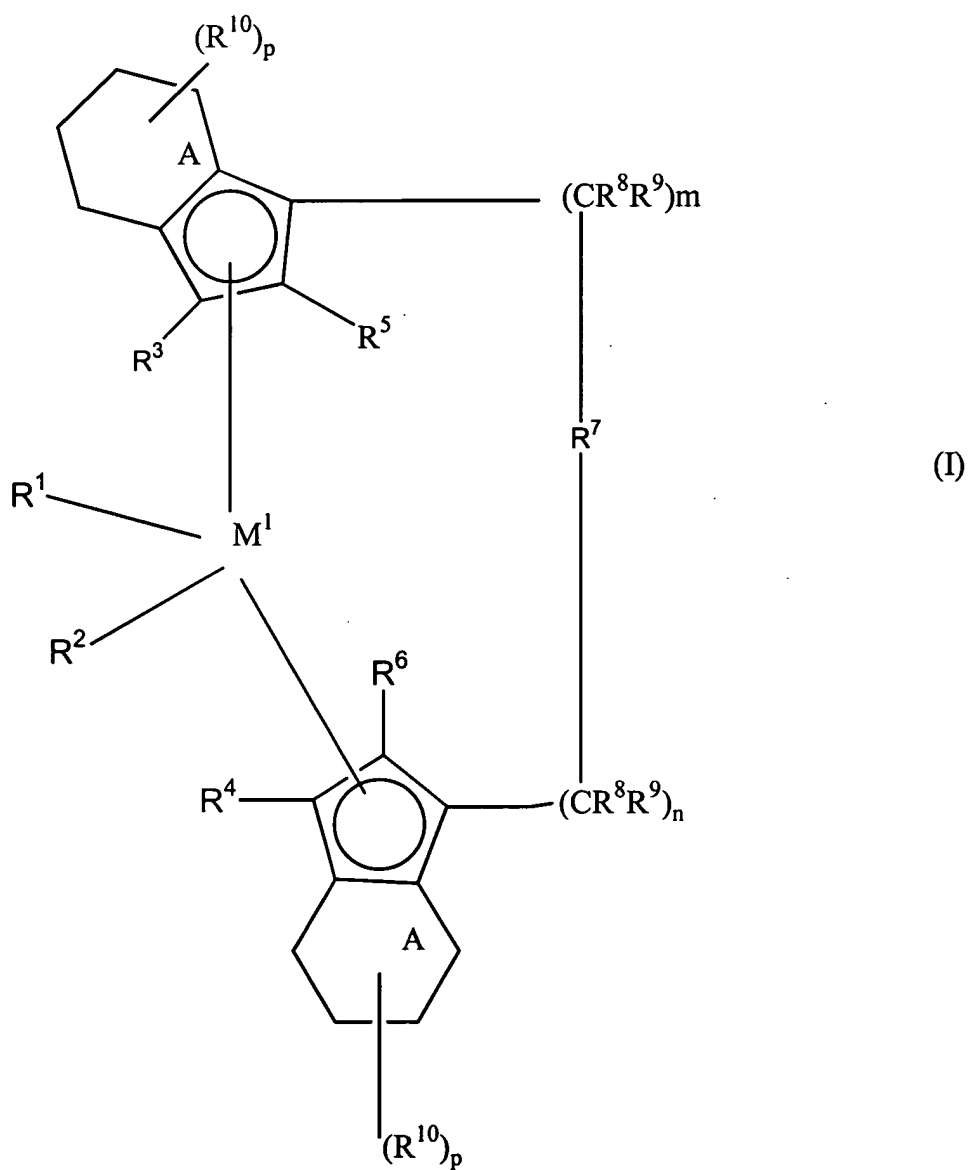
for R^{11} , R^{12} and R^{13} ,

rings A are saturated or aromatic,

p is 8, when rings A are saturated, and

p is 4, when rings A are aromatic.

7. A compound of the formula (I) for preparing essentially isotactic olefin polymers



in which

M^1 is a metal from group IVb, Vb or VIb of the Periodic Table

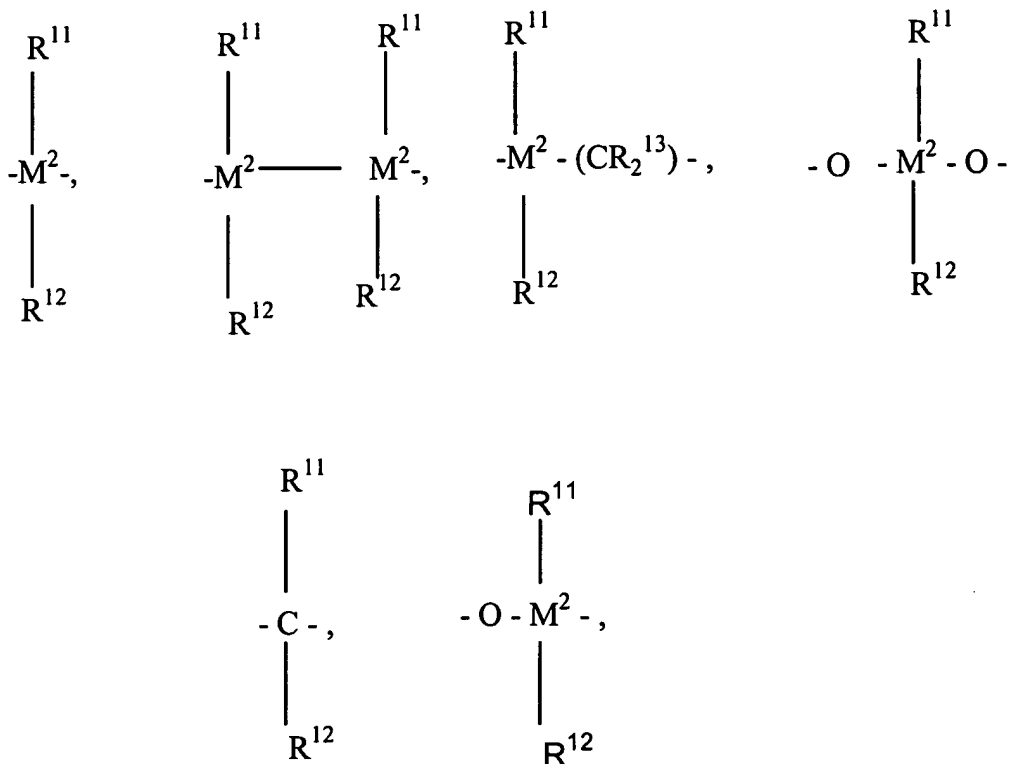
R^1 and R^2 are identical or different and are a hydrogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -alkoxy group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -aryloxy group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_7 - C_{40} -alkylaryl group, a C_8 - C_{40} -arylalkenyl group or a halogen atom,

R^3 and R^4 are hydrogen,

R^5 and R^6 are identical or different and are a halogen atom, a C_1 - C_{10} -alkyl group, which is optionally halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group

R^7 is

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$=BR^{11}$, $=AlR^{11}$, $-Ge-$, $-Sn-$, $-O-$, $-S-$, $=SO$, $=SO_2$, $=NR^{11}$, $=CO$, $=PR^{11}$ or $=P(O)R^{11}$,

where

R^{11} , R^{12} and R^{13} are identical or different and are a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -fluoroalkyl group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -fluoroaryl group, a C_1 - C_{10} -alkoxy group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_8 - C_{40} -arylalkenyl group or a C_7 - C_{40} -alkylaryl group, or a pair of substituents R^{11} and R^{12} -- or R^{11} and R^{13} in each case with the atoms connecting them, form a ring,

M^2 is silicon, germanium or tin,

R^8 and R^9 are identical or different and are as defined for R^{11}

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2,

the radicals R^{10} are identical or different and are as defined

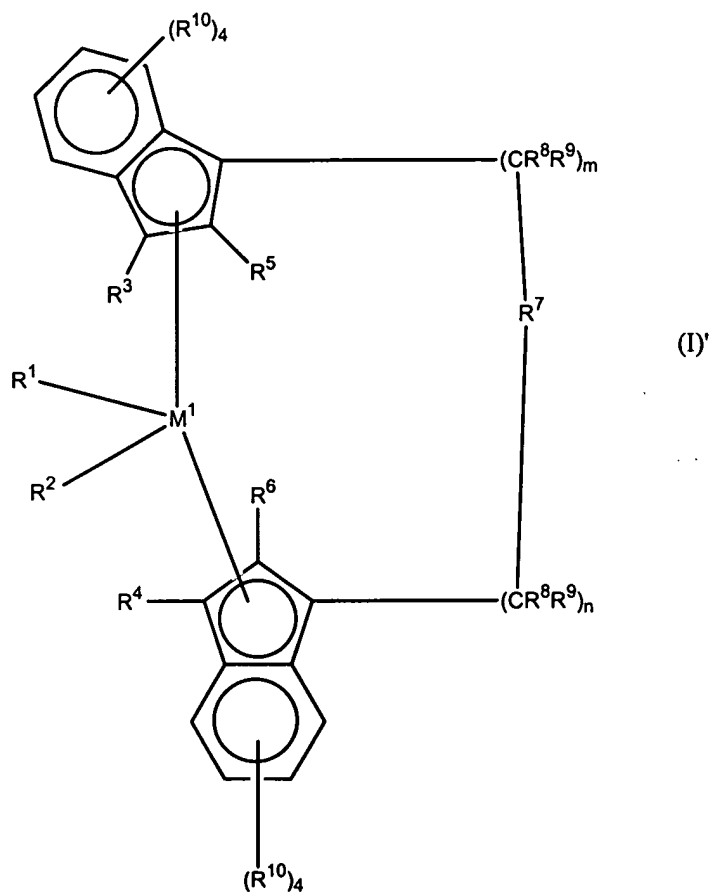
for R^{11} , R^{12} and R^{13} ,

rings A are saturated or aromatic,

p is 8, when rings A are saturated, and

p is 4, when rings A are aromatic.

19. A compound of the formula (I)'



in which

M^1 is a metal from group IVb, Vb or VIb of the Periodic Table,

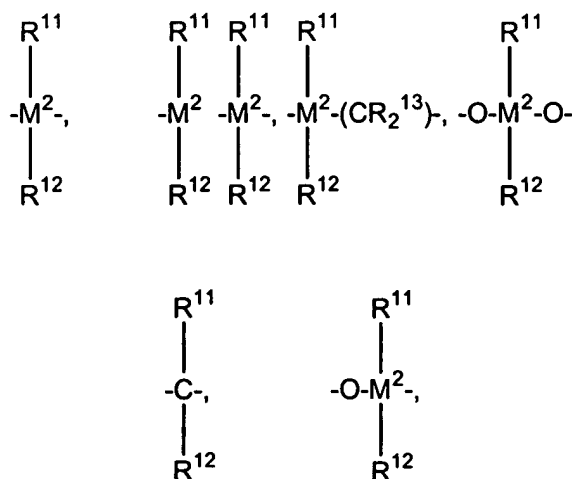
R^1 and R^2 are identical or different and are a hydrogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -alkoxy group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -aryloxy group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_7 - C_{40} -alkylaryl group, a C_8 - C_{40} -arylalkenyl group or a halogen atom,

R^3 is a hydrogen atom, a halogen atom, a C_2 - C_{10} -alkyl group, a C_1 - C_{10} -alkyl group which is halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

R^4 is a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, which is optionally halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group,

R^5 and R^6 are identical or different and are as defined for R^3 and R^4 , with the proviso that R^5 and R^6 are not hydrogen,

R^7 is



$=BR^{11}, =AlR^{11}, -Ge-, -Sn-, -O-, -S-, =SO, =SO_2, =NR^{11}, =CO, =PR^{11}$ or $=P(O)R^{11}$,

where

R^{11}, R^{12} and R^{13} are identical or different and are a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -fluoroalkyl group, a C_6 - C_{10} -aryl group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_8 - C_{40} -arylalkenyl group or a C_7 - C_{40} -alkylaryl group, or a pair of substituents R^{11} and R^{12} or R^{11} and R^{13} , in each case with the atoms connecting them, form a ring,

M^2 is silicon, germanium or tin,

R^8 and R^9 are identical or different and are as defined for R^{11}

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2, the radicals R^{10} are the same or different and are as defined for R^{11}, R^{12} and R^{13} .

25. The compound as claimed in claim 1, wherein R^3 is a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group which is halogenated, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group.

26. The compound as claimed in claim 1, wherein R^3 is a hydrogen atom, a halogen atom, a C_6 - C_{10} -aryl group, an $-NR_2^{15}$, $-SR^{15}$, $-OSiR_3^{15}$, $-SiR_3^{15}$ or $-PR_2^{15}$ radical in which R^{15} is a halogen atom, a C_1 - C_{10} -alkyl group or a C_6 - C_{10} -aryl group.